SYNC BURSTS FOR FREQUENCY OFFSET COMPENSATION

ABSTRACT OF THE DISCLOSURE

A method (500) and system for compensation of frequency offset between a first transceiver (102) and a second transceiver (104) in wireless communication are disclosed. The compensation of the frequency offset between two or more transceivers (102, 104) is achieved using frequency synchronization bursts. These bursts contain information about the frequency offset. The frequency synchronization bursts are transmitted by the first transceiver at a range of frequencies above and below its carrier frequency (502). A second transceiver that receives at least one of these bursts (504) determines the frequency offset (504), and adjusts its frequency to match the frequency of the first transceiver (508). Thereafter, the second transceiver may enter a low power sleep mode (510) in order to reduce its power consumption. The second transceiver returns to active mode (512) just before the start of the transmission of the data packets (514).